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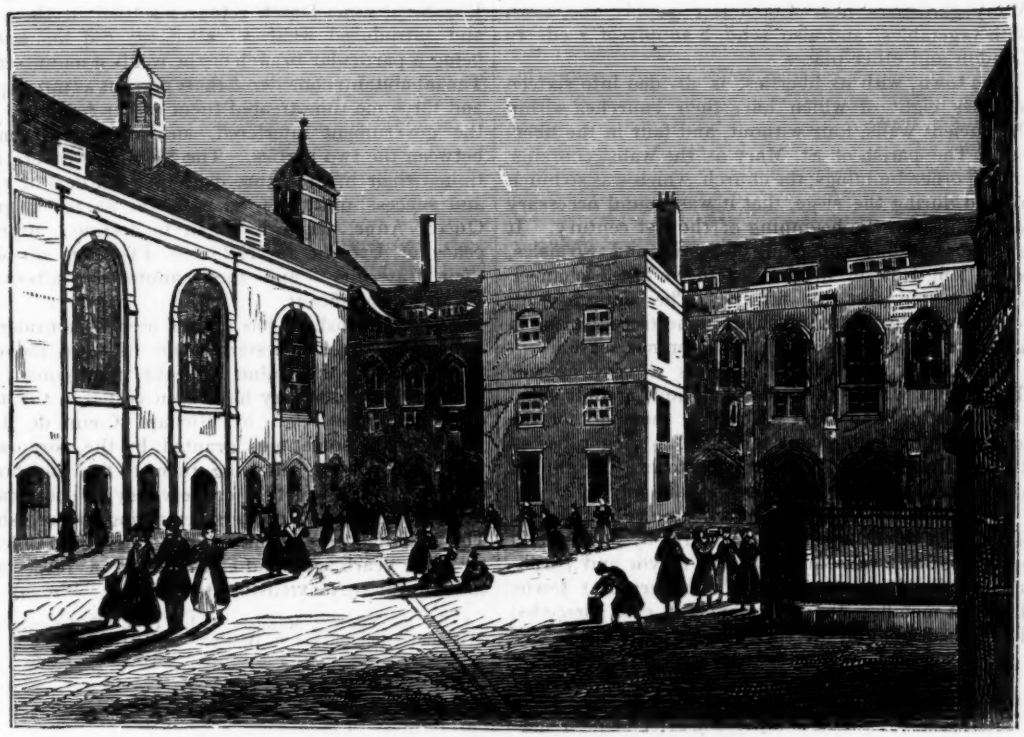
HISTORICAL AND DESCRIPTIVE NOTICE OF CHRIST'S HOSPITAL



THE OLD HALL AND WHITTINGTON'S LIBRARY.

II.

In the first article on this subject we gave a brief sketch of the train of circumstances which preceded and were preparatory to the founding, by Edward the Sixth, of the charitable institution of Christ's Hospital: we must now detail the gradual developement of the benefits which it was intended to afford.

Within five months after the death of Edward, the buildings belonging to the old Grey Friars' convent were sufficiently restored to accommodate three hundred and forty children, who were admitted in November, 1553 Besides these, two hundred and sixty children were daily fed at Christ Church. During the infancy of the institution, the Hospitals of St. Thomas and Bridewell were so far connected with Christ's Hospital, that the expenses were defrayed out of one common fund; but afterwards, from the necessity of appointing separate boards of governors, and from the particular bequests of individuals, they became three distinct corporations, united with, and yet in some degree independent of, the corporation of London. This separation was so far beneficial, that benevolent persons were enabled to select, from among these charitable institutions, that one which appeared to them most deserving of their bounty. From this time, constant additions were made to the revenue of Christ's Hospital, by donations, bequests, and legacies. Richard Casteller, a shoemaker in Westminster, left lands which, though worth only forty-four pounds per year at that time, have now become very valuable. The revenues accruing from Blackwell Hall were about this time made over to Christ's Hospital by the corporation: this hall was, according to the ideas of those times, intended for the protection of the woollen trade, as no woollen cloth was allowed to be sold in London until it had been entered at Blackwell Hall. Various fines and penalties, derived from different sources, were also to be payable into the funds of the hospital, so that its revenues assumed a heterogeneous character. Monthly collections were also made in the different city parishes; and the proceeds handed over to the hospital.

There have occasionally been complaints made, that the Blue Coat School, as at present managed, does not fulfil the purposes of the original founder, and that it was intended for the poor and destitute only. Such certainly appears to be the case at a cursory examination of the subject; but the Rev. W. Trollope, in his excellent history of the institution, traces the various circumstances which led to gradual changes in the plan of proceeding; changes which seem to show that the spirit, though not the letter, of the founder's intentions has been always observed. The estates originally vested in the hospital were by no means adequate to its support when the number of the inmates became large, and it was necessary, in accepting gifts from other quarters, to attend to the conditions on which those gifts were made, most of which conditions were, that poor persons, *coming from*

a particular place, should receive aid in a particular way. By the 43rd of Elizabeth, every parish was bound to provide in a certain way for the support of its poor by the payment of poor-rates; and thus a large amount of individual distress was relieved, which would otherwise have fallen upon the hospital. It appears, that from the earliest period of its foundation, the hospital relieved two distinct classes of persons: first, persons who, come from where they might, were in danger of perishing if not relieved by the hospital: second, the children of freemen, who were in destitute circumstances; each child to be, on its reception, less than four years of age, and to be recommended by an alderman and six citizens: the child to be taught reading, writing, and arithmetic, and at a proper age to be apprenticed out to some respectable trade. Now the establishment of poor-laws took away the necessity for receiving distressed persons for temporary assistance into the hospital; and the governors were therefore able to devote their funds more particularly to education. It is also worthy of remark, that, from the very first, the children who were admitted, required strong recommendations from the governors, or other city authorities; and therefore the plan at present pursued is not so much a departure from, as a modification of, the original plan.

From the time of the first foundation to the year 1600, the hospital received about ten thousand pounds in donations and legacies, together with estates, which at the present time produce as much as eight thousand per annum. But at that time the annual rental was not much above one-tenth of this large sum; and the governors found the income insufficient for the demands on the funds of the institution; they were therefore obliged to diminish the number of children maintained at their charge, and to restrict the admission of new candidates within narrower limits than before. Although the number of persons having a *right* to admission was thus diminished, yet the wishes of individual benefactors occasioned many improvements to be made in particular branches of the institution:—thus, Lady Ramsey, and after her other persons, left estates, the proceeds of which were to be applied to the support of some of the boys at the universities, when they should have made a certain advance in their studies; the same lady also left an estate to be devoted to the foundation of a *writing-school*, in addition to the schools already established.

During the seventeenth century, the prospects of the charity brightened, since we find that, in Camden's time, six hundred children were maintained in the house, and more than a thousand persons received relief in alms. The establishment escaped pretty well from the effects of the Great Plague in 1665; but the fire of the following year greatly damaged the buildings; and the liberality of the city authorities had to be appealed to in reparing the damage. We find that at about this period, on the admission of a child it was required—that his father should be a freeman, unable to support the child; that the child should be not less than seven years of age; that he should be recommended by the minister and churchwardens of the parish; and that the parish in which he was born should engage to discharge him from the hospital at the age of fifteen. As the applicants became more numerous, it was found necessary to make these regulations still more stringent, and it was ordered, in addition, that no child should be admitted but one who had lost one of its parents, and that no two children of one family should be admitted. We may here mention that there was a school established in Hertfordshire, where the girls and the younger boys were maintained.

Up to the time of King Charles the Second, the education received at the school was of rather an elementary nature; but in his reign, and through the instrumentality of Sir Christopher Wren, and other distinguished persons, a mathematical school was established, which greatly raised the reputation of the institution. Forty boys were admitted into this school, where they were to receive a mathematical education, of such a character as would fit them for the naval service, after which they were to enter either the King's or the merchant-service. The necessary funds for this object were provided, partly by the king, and partly by the munificence of private individuals. Shortly afterwards Mr. Henry Stone, among other bequests, left a sum of money, the interest of which was to be devoted to the education of an additional number of boys in the mathematical school: these boys were at first associated with those on the king's foundation, but were afterwards separated; and since then the "twelves," *i.e.*, the twelve boys on Stone's foundation, have been kept distinct from the forty "king's boys." Additions have been since made to the number of mathematical boys by bequests from Mr. Stock and Mr. Travers.

Immediately after the fire of London, the same individuals who urged the king to found the mathematical school, also rendered their own services to repair the damage done by the fire. Sir Robert Clayton spent 5000*l.* in repairing some of the buildings; and Sir John Frederick expended a still larger sum in rebuilding the Great Hall: this building was a noble and commodious structure, and remained in use until the year 1827, when it was replaced by the present hall.

The donations made to the hospital, in the century between 1600 to 1700, amounted to 110,000*l.*, besides the rentals of estates and the interest of monies in the funds; and since that period additional donations, together with the very improved rental of the estates, have enabled the governors to meet all their expenditures. Repeated changes, however, were made in the limitation as to admission, arising from the wishes of different benefactors being from time to time complied with. The decision finally arrived at, however, and which is nearly the same as that at present acted on, was briefly as follows:—Two-thirds of the applicants must be the sons of freemen: the age of admission to be, not before seven nor after ten years of age: two of one family may, under certain circumstances, be admitted: no foundling, nor a child maintained at the parish charge to be admitted: that no children who are any way deformed or diseased; or one who has any *adequate* means of support* be admitted: no child to be admitted without a certificate from the minister and churchwardens of the parish from whence they come, as to eligibility, &c.; and lastly, that all the parties concerned must be strictly examined on these points before an admission can be granted.

Not only in the mode of admission, but also in the mode of government, changes were made from time to time. Originally there were sixty-six governors, elected for two years from among the London corporation; and afterwards this triennial election was abolished, and vacancies were filled up as they occurred. But subsequently, when large and valuable gifts were made to the charity, it was deemed proper to offer the right of patronage or presentation to those benefactors through whom the funds had

* We may remark, that if there is any part of the arrangements which clashes with the intentions of the original founder, it seems to be this one; for the limit of incapacity is laid as high as 300*l.* per annum; that is, a parent may have an income as high as 300*l.* per annum, and still send his son to this establishment to receive gratuitous maintenance and education.

been increased. In 1782, accordingly, an Act of Parliament was passed, by which the common council were empowered to appoint twelve governors, with the same privileges as other governors: any other person, likewise, on making a donation of 400*l.*, or upwards, became a governor; as did likewise a certain number of persons nominated by the *ex-officio* governors. Thus there are *ex-officio* governors, benefactors, governors, and presentation-governors, of which only thirty-eight, (viz. twenty-six aldermen and twelve common councilmen,) are *ex-officio*, the others, amounting to several hundreds, belonging to the other classes.

About the year 1790 the grammar-school, together with some other parts of the building, had become so dilapidated as to render rebuilding necessary. Accordingly, a building, containing an upper and lower grammar-schools, and another apartment, was built out of funds supplied through the benevolence of one of the friends of the establishment. Unfortunately, however, the materials of which this building was formed became so decayed through dry-rot, that in a few years it was found necessary to pull it down, and to erect in its stead a new building, in which the grammar, mathematical, and drawing schools were contained under one roof. Had the funds of the institution been such as to leave a surplus for the entire rebuilding of the whole hospital on one uniform plan, it is probable that the ultimate expence would have been less than that which has actually been incurred; but such a plan was impracticable; and the governors had therefore to make improvements and alterations as rapidly as their funds would permit: in furtherance of this plan, a subscription was set on foot, at the head of which the corporation of the city of London appeared with the noble donation of one thousand pounds. Out of the fund thus produced, the expense of the new grammar and mathematical schools was defrayed.

In proportion as education spread throughout the country, it became matter for inquiry, how far the system of education pursued in Christ's Hospital was adequate to the objects intended to be produced. This was matter of discussion towards the end of the last century; and still more about thirty years ago, when a Committee of Education was chosen from among the governors, to investigate the whole subject, and report on such changes as might appear most desirable. Considerable improvements were the result of this inquiry; aided also, it is probable, by a parliamentary commission, which was appointed to inquire into the mode of management of the principal public charities. The nature of these changes we shall further allude to when we come to speak of the internal economy of the institution.

Old buildings were pulled down, and new ones erected from time to time, according to the wants of the institution, and the pecuniary means at the disposal of the governors. Some of these erections were rendered necessary by the appearance of ophthalmia in the school about twenty years ago. This was considered in some degree owing to the practice of the boys all washing in one spot, and occasionally using the same towels. To remove this source of inconvenience, a new lavatory, or washing-place, was erected, containing a long trough on each side, with pipes and taps at convenient distances, and such a supply of hot and cold water, that one hundred boys can wash at the same time; and every endeavour was and is made to preserve the utmost cleanliness in the arrangement of this room.

The last event in the history of the hospital to which we can here allude, is the rebuilding of the hall, after the design of Mr. Shaw. The first stone of this elegant building was laid by His Royal Highness the Duke of York, on 28th of April, 1825. The construction of the hall occupied about four years, and it was opened on 29th of May, 1829, in the presence of a large number of distinguished persons. It is this building, which meets the eye of a spectator on the north side of Newgate-street, the governors having determined to keep an open space between the play-ground in front of the hall and the street, the two being separated by iron railings.

We have thus endeavoured to trace the chief events in the history of this noble institution, from the times anterior but preparatory to its establishment down to the present time. We shall now have to give a description of the various buildings forming Christ's Hospital, and to describe the mode of education adopted, together with the internal economy of the establishment.

GEMS AND PRECIOUS STONES.

IV.

6. We come now to notice the TOPAZ, a well-known stone of great beauty, but of small value. Its chief colours are a bright yellow and a fine pink, but the latter colour is generally produced by the action of heat. It is sometimes found quite colourless, or with a faint tinge of blue, in which latter case it has the name of *oriental aquamarine*. Topazes are found in Brazil, Saxony, Siberia, the Oural Mountains, Kamschatka, Mucla, in Asia Minor, Cairngorm, in Scotland, and in New Holland; at all which places it occurs in loose crystals, like pebbles among the remains of broken rocks. The pale and straw-coloured Saxon topazes, brought from Schneckenstein, lose the colour entirely when heated. Some of the topazes of that country assume a green tint, when they are erroneously called *Saxon* or *occidental chrysolite*.

The price of this stone varies exceedingly. When Cook first visited at Rio Janeiro, the best topazes are said to have been sold, large and small together, in octavos, or eighth parts of an ounce, at the low rate of 4*s.* 9*d.* the octavo. This forms a singular contrast with the account given by Tavernier of a topaz in the possession of the Great Mogul, which only weighed 157 carats, (rather more than an ounce and a quarter,) and yet cost 20,000*l.* This was probably, however, an *oriental* topaz, which, as we have already seen, is the name given to a gem of far greater value, viz., the *yellow sapphire*. The largest topaz at present known is preserved in the Museum of Natural History, at Paris, and weighs rather more than four ounces. Topazes of a deep yellow, inclining to orange, are often absurdly called *occidental hyacinths*, and *hyacinthes miellées* by the French; that is, having the colour of *honey*. It is very doubtful to what substance the topaz owes its colour. According to Berzelius it consists chiefly of alumina and silica, with a small portion of fluoric acid.

The modern topaz is supposed to be the chrysolite of the ancients; and their topaz identical with our chrysolite. This is probable, because the term *topaz*, not having any peculiar meaning, is as likely to have been applied to one substance as the other; while the term *chrysolite*, meaning *golden stone*, would not be an improper name as applied to a golden-coloured gem, such as our topaz: but it is not probable that it was originally applied to such a stone as the modern chrysolite, whose colour (dark green, sometimes inclining to brown) does not at all merit the epithet of "golden."

7. The EMERALD and BERYL, owing to the similarity of their composition, are considered as the same

stone. Its rarity and great beauty have caused it to be universally considered as a gem, though, according to the definition we have hitherto given, it can hardly be reckoned as such, either as to hardness or specific gravity. The only known localities of this stone are several places in Peru, especially the valley of Tomana, near New Carthagena; but it is probable that it was procured by the ancients from Ethiopia. In common language, the term *emerald* is applied solely to such of these gems as are of a beautiful grass-green colour. The blue variety, which is met with more frequently, and in larger crystals, is called *beryl*, or more commonly *aquamarine*, from its colour resembling that of the sea viewed at a distance in a clear atmosphere. The primitive form of the emerald is a hexagonal prism; but it is very frequently modified. This gem was greatly prized by the ancients. Pliny describes its brilliancy as being like the air that encircles us, and many of the early writers speak of it as being comforting to the eyes. The large emeralds mentioned by Herodotus, however, must have been of a different composition. We are told that in the valley of Manta, in Peru, a real emerald of immense size was formerly worshipped by the ignorant people of that district, under the name of *the mother of emeralds*, and offerings made to it of smaller emeralds, said to be its daughters. A marvellous account of the emerald in the monastery of Reichenau, in Lake Constance, is also related. It is said to weigh twenty-eight pounds and three quarters! Strangers are now prohibited from examining it; but one traveller, who once had an opportunity of doing so, declares it to be only coloured glass, and another spoke of it as green fluor-spar. The emerald is composed of silex, alumine, and carbonate of lime, and its colour is produced by chrome.

8. Many varieties of GARNET are reckoned by lapidaries: the most esteemed is the *noble* or *precious* garnet; also called *oriental*, from whatever quarter procured. This kind is of a rich blood-red colour, but far inferior in brilliancy to the oriental ruby, or red sapphire. Werner calls this fine variety of garnet *pyrope*, while Karsten gives it the name of *almadine*. When these stones incline to an orange or purple colour, they are esteemed less valuable: the orange are called by the French *hyacinthe la belle*, and by the Italians *jacintho guarnacino:* the purple variety has the appellation of *Syrian*, a corruption of *Sorian*. This stone is composed of silica, lime, alumina, and oxide of iron. It is obtained chiefly from Pegu. In Greenland also it is very abundant and of fine quality. Immense quantities are found in Bohemia, and other parts of Germany, but these are inferior in quality to the rest.

The garnet might be of essential service to the optician; for though its refractive power is very great, it has no double refraction, and the light which it transmits is almost homogeneous, as the gem absorbs almost all the rays except the red. On this account it is valuable in the construction of lenses of very short focal length, such as those of microscopes; and simple microscopes of garnet have been found far superior to any others.

9. QUARTZ is the next stone in the scale of hardness, and this, in its purest and simplest form, constitutes white *rock crystal*, a substance too common to be ranked among the precious stones. There are several coloured varieties of it, however, that are commonly considered as gems, especially the following:—

Common AMETHYST, or AMETHYST QUARTZ, so called to distinguish it from the *oriental amethyst* or purple sapphire, is simply quartz, or pure silica, which, by the addition of a very small portion of metallic oxide, has acquired a beautiful violet colour, like that part of the prismatic spectrum where the red and blue are so exactly balanced, that neither of them preponderates. It is a common but erroneous notion that this stone forms the *matrix* of the true oriental amethyst: that is to say, it is supposed to be the stone or rock in which the latter gem is found imbedded; but the common amethyst is almost exactly similar in composition to pure flint.

Another beautifully-coloured variety of quartz is the PRASE and CHRYSOPRASE, which are of a pleasing apple-green tint, sometimes passing into grass-green, when they have been confounded with the emerald. Their colour is due to oxide of nickel. Those who consider these stones as distinct from each other, state that the true chrysoprase is found only in Silesia. It is greatly valued as a jewel; for a ring-stone of good transparent and homogeneous chrysoprase has often been sold for upwards of twenty guineas. This stone greatly exceeds the other varieties of quartz in hardness.

This stone is liable to lose its colour and become black by a very slight elevation of temperature, so that it requires care in cutting and polishing the facets, lest the mere friction should produce this effect. It is also stated that moisture as well as heat affects the colour of this gem.

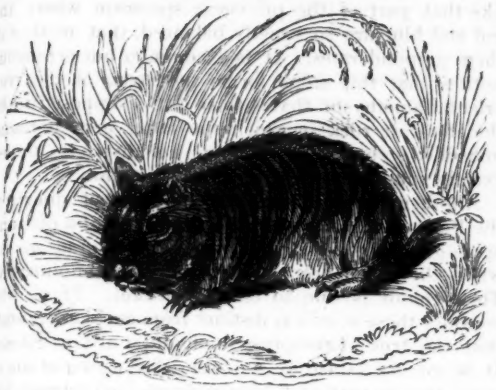
The CARNELIAN, or CORNELIAN, and the CALCEDONY are the same stone, but differently coloured. By the latter name are known such specimens as are white, blueish-white, or light-blue, while the term carnelian is used for such as pass from white into yellow, orange, and red. The deeper and more transparent the red colour is, the more is the stone valued; while those of a pale yellow colour, or which are only translucent, are very little esteemed.

The best carnelians come from India, Japan *, and other parts of Asia, but the ancients procured theirs from the interior of Africa, whence they were brought through Carthage. The royal collection at Paris, and the British Museum, have numerous ancient engraved carnelians of a fine description. Many of those in the latter institution were found in the field of Cannæ in Apulia, where Hannibal defeated the Romans so signally, and where so many Romans of the higher class were slain, that he is said to have forwarded to Carthage *three bushels* of the rings which they wore, as a token of his victory.

Calcedony, in its simplest state, is a stone of very small value, and frequently occurs among pebbles and gravel in all countries. But when it is found in layers of various colours, it is called *onyx* and *sardonyx*. These terms are now much confounded together; but it seems that the ancients applied the term *onyx* to semi-transparent specimens of calcedony, variegated by opaque white layers, or covered with an opaque white crust; so that by partially cutting away this crust, white figures could be left upon a coloured ground. The term sardonyx is derived from *onyx*, and *sarda*, the ancient name for carnelian, so that it properly applies to stones presenting alternate stripes or layers of carnelian and onyx of various colours. Engravers have long availed themselves of these stones, in forming those beautiful specimens of their art called *cameos*, in which the different layers of the stones are so cut away as to form coloured figures *in relief*. The hair, for instance, being represented by a brown, the face by a flesh-coloured, and the drapery by a white layer. Such cameos are greatly esteemed, in proportion to the number of colours they exhibit.

* The Japanese are said to possess the art of deepening the colour of pale carnelians so as to produce a most beautiful, uniform, and permanent cherry-colour.

THE MARMOT.



The different species of marmot form the genus *Arctomys*, which literally signifies "bear-rat," or rat having the body formed somewhat like a bear. This generic name has, however, been restricted to such of these animals as are without cheek-pouches, while to the other division, having cheek-pouches, the name of *Spermophilus* is applied.

The marmot of the Alps may be taken as the type of the first division; and in describing the appearance and habits of this interesting little animal, we shall, with some trifling exceptions, be describing those of the allied species.

The Alpine marmot is an inhabitant, as its name implies, of the Alps, and of some other mountainous regions of Europe; but it is not found even in the most elevated parts of the British isles. It is distinguishable by a thick, inelegant body, short thick legs, large and flat head, truncated ears, short tail, and general clumsiness of appearance. The prevailing colour of the fur is gray on the upper part of the body, and fawn colour, or brownish red, beneath. The eyes are large, with round pupils. The upper lip is cleft, leaving the incisors at all times uncovered. The cheeks are so thickly covered with fur as to change the apparent proportions of the head. The fur is also very thick on the back and sides of the animal. From this description of the marmot, it is evident that an appearance of heaviness and stupidity is given to the animal, not by any means discoverable in its habits and economy. Destined principally for a subterraneous existence, it requires not the lightness and agility of the squirrel, and having few enemies, and requiring little more for sustenance than the scanty herbage round its burrow, quickness of motion is unnecessary to it. Accordingly we find its locomotion is slow, it raises itself with apparent effort, and climbs slowly up the clefts and projections of its native mountains.

That the marmot is not destitute of sagacity and ingenuity is proved by its method of working in the formation of its burrow, and by the caution observed on occasion of quitting its retreat. The burrow of this animal is generally in the elevated parts of mountains, above the forest range, and within the region of perpetual snow. It always consists of two galleries or alleys, each five or six feet long, one containing the dwelling and the entrance to the dwelling, and the other which joins this, but has a greater inclination, and opens lower down the hill, is a sewer or drain, by means of which the dwelling is always kept dry and comfortable. The nest itself is a circular excavation, containing a great quantity of moss and dried grass, and made sufficiently large to admit a considerable number of the animals. The different members of the society inhabiting the same burrow work in unison, both in preparing it, and in stocking it with grass, &c., for their winter store. They scoop out the earth with great expedition, and, throwing away a portion of it, beat the rest into a firm and compact pathway. The marmot is a very cleanly animal, and throughout its arrangements there is an evident regard to neatness and comfort, in an abode which is to form its place of retreat and safety at all seasons of the year, and its constant dormitory during the season of torpor. The entrance to the burrow is generally made beneath some projecting stone or ledge, in order that the rain or melting snow may not penetrate; and as an additional security, the animal on retreating for the winter season enters the burrow backwards, having in its mouth a knot of dried grass which it draws tightly into the small aperture which forms the entrance, and thus completely closes it.

It is very commonly said that these little animals when laying in their stores of grass for the lining of their winter abode, have the following ingenious method of working. One of the members of the little society intending to congregate together, permits his body to be made use of as a kind of sledge for the transportation of the stores. He turns on his back and allows his comrades to load him with as much of the grass, moss, &c., as he can conveniently support between his paws. When thus loaded, his companions seize him by the tail and pull him along with his load, he contriving to keep steadily on his back all the time. When either party gets tired, a change is made, and other marmots supply their places, and so on till the provisions are safely lodged in the burrow. We have heard the same story related of rats, but do not, in either case, vouch for its accuracy.

The commencement of lethargy in the marmot seems to depend on the beginning of the cold weather; the time of their final retreat to their burrows varies, therefore, from the middle of September to the middle of October. The repose of this animal is not, like that of the dormouse, liable to frequent interruptions; it is a deep lethargy, in which the whole winter is passed without food: accordingly, the animal, which at the commencement of winter is so fat as to be sought after by the mountaineers as an article of food, at the termination of this long period of abstinence has become so extremely thin as to render its flesh hard and coriaceous, and quite unfit for that purpose. To refined appetites the marmot would at any season be unpalatable, for the fat with which it is loaded, when in its best condition has very much the taste and appearance of lard.

The marmot remains in its winter abode, until the returning warmth of spring, in the month of March or April, causes it to awake from its long sleep and to look about for means of subsistence. Removing the barrier from the entrance of its burrow, it now seeks the lower ground where food may be obtained; but it does not appear at any season to roam to a great distance from its proper home. A very remarkable instinct is observed among these animals, on occasion of quitting their retreats. They appear to enjoy the sunshine, and bring out their young ones to share their pleasure. These show some degree of activity: they chase one another along the slopes of the hill, or raise themselves on their hind feet with their faces towards the sun, as if to enjoy more fully the benefit of his rays; meanwhile, one of the family is placed on an elevated spot near the mouth of the burrow, and within sight of the rest, who are thus sporting or seeking for food. If an enemy or any new object be observed by the sentinel on guard, he utters a shrill cry, when in an instant all the scattered members of the society retreat towards the burrow, or if

they find themselves too distant from it, shelter themselves in holes or clefts in the hill.

The marmot is not so productive as many other of the rodentia order, there being but one litter in the year consisting, in general, of five; but the animals are subject to fewer casualties than we might expect from the inhospitable region they inhabit. Their watchful habits protect them from many enemies, though the sudden pounce of the eagle or the vulture sometimes proves fatal to them; their dormant propensities prevent the intensity of the cold from affecting them; and the little provision necessary for their subsistence enables them to gain a living in the barren regions they inhabit.

The Alpine marmot is easily tamed, and may be taught many amusing tricks. In the domestic state it is very gentle and docile, and though capable of inflicting severe wounds with its sharp teeth, is seldom provoked to do so. The strength of the incisor teeth is so great that nothing but a cage of iron wire will retain these little animals.

The Polish marmot is rather larger than the species just described. It does not inhabit regions equally elevated, and in making its burrow, it explores to a great depth, and makes an excavation large enough to contain twenty or thirty individuals. It is found from Poland to Kamtschatka.

The various species of American marmot belonging to this genus cannot here be particularised. The Maryland marmot has been known as the "ground hog" and the "Bahama rabbit." The Missouri marmot, a most abundant species, has on account of its peculiar barking noise acquired the name of the "prairie dog;" and there are others known in the country by various familiar names, which are now placed in this genus of animals.

We must pass on to notice the other division, mentioned at the commencement of this article, and entitled *Spermophilus*, or marmots whose leading characters are the possession of cheek-pouches, and their being solitary, not social in their habits.

The animals of this genus are more nocturnal in their habits than the true marmots, and this, with their wild and solitary character, makes it difficult to study them. The social animals are less afraid of man, and therefore more easily observed by him than the solitary ones. The proper place of the genus we are now considering, in the order of rodent animals, seems to be that of a connecting link between the true marmot and the squirrel. Towards the latter animal it approaches in having the feet and legs more lengthened, and in some cases the tail long and covered with long hair.

The souslik, or Siberian marmot, is by far the prettiest of the genus. It is of a yellowish-brown colour on the upper part, spotted or waved with white, and has the under part completely white. It is partially carnivorous, and in its hoards are occasionally found reserves of birds and small quadrupeds, on which it feeds. The cheek-pouches, which are depositories for carrying provisions, and can easily be emptied of their contents by the pressure of the paws of the animal, are in this species considered large for the size of the marmot.

The American species, called Parry's marmot, belongs to this genus. It was noticed by Hearne in the extreme north of the American continent, and was considered by him as a ground-squirrel. On Franklin's expedition it was observed, and its true place was assigned to it by Richardson. It is mottled with black and white, and on the under part is rusty red. It is furnished with cheek-pouches, and its habits appear to be similar to those of the rest of its race. We might also describe the different species called Franklin's marmot, the powdered marmot, and Richardson's marmot, but the trivial points of difference would be uninteresting to the general reader.

The American species of marmot are probably very numerous, and many doubtless remain wholly unobserved and undescribed. As that vast continent becomes more fully explored, it is probable that a large accession will be made to the list of animals of this description. As far as present observation goes, however, we have much to admire in the habits and remarkable instinct of the marmot tribe, and in the beautiful adaptation of their forms and natures to the place they hold in the scale of being.

The wood-cut at the head of this article represents a fine marmot, which died some years ago at Exeter Change. In colour it was light-brown on the upper part, with a darker hue down the centre of the back, and slight bars of the same colour marking the sides. The tail was dark-brown, and from eye to eye the animal was marked with a black crescent: a black bar also extended from one ear to the other, passing round the mouth and nostrils, but leaving the latter pure white. The specific name of this animal is unknown.

THE SYRIAN COAST. IV.

THE plain, at the western extremity of which Acre is situated, extends about thirty miles from east to west, by twenty from north to south. It is naturally the most fertile part of Palestine, and is the Great Plain of Scripture, or Plain of Esdraelon, which fell to the lot of the tribe of Issachar, occasioning them to "rejoice in their tents" (Deut. xxxiii. 18). Although, from the earliest ages to the present, devastated by the frequent tread of hostile armies, it still retains much of its ancient productiveness, and is described by a recent traveller as "one sea of cultivation," with only a very few small villages scattered over its surface. In this plain fell the host of Sisera; here also was King Josiah slain by the Egyptians; here Vespasian mustered the army which accomplished the destruction of Jerusalem; here numerous encounters took place during the long siege of Acre, (A.D. 1189—1191); and here, in 1799, a division of the French army under Kleber was attacked and nearly annihilated by the Turks. Among the mountains that form its eastern boundary, Jebel Tor (Mount Tabor) is conspicuous, in whose immediate vicinity stand Nazareth, Emmaus, and Tiberias, each fraught with holy recollections, but now all mere villages, bearing respectively the disfigured appellations of Naszera, Hamam, and Tabarea; the last, the scene of the overthrow of the kingdom of the Latins, and still presenting numerous memorials of its former rulers. On the west is the ridge of Carmel, at whose foot, on the southern side of the bay of Acre, is Caypha, or Haypha, with a number of tombs, (to which a Jewish origin is ascribed by some travellers,) excavated in the rock, whence its ancient name (Kepha). Between this point and Acre, the Nahr el Mukatta, (the modern name of "that ancient river, the river Kishon,") in winter pours its flood into the bay, but is almost dry in summer; and further north is a smaller stream, called Naamany, the ancient Belus, where one of the most useful arts is said to have originated from accident*, and the sand from the mouth of which was long employed in

* Pliny states that a party of Phœnician sailors, having landed at the mouth of this stream, propped up the kettle in which they cooked their food with pieces of nitre and sand from the shore, and to their surprise found a transparent substance produced by the action of the fire: this was glass.

that art at Sidon*, and was even removed in shiploads for the use of the Venetian glass-works, as late as the early part of the eighteenth century. This stream rises in the mountains of Lebanon, and in autumn becomes charged with an ochreous matter, (swept from the hills by the heavy rains,) which imparts to its waters a sanguine hue, fabled by the heathen priests of old to be the blood of Adonis, yearly slain in Lebanon; a fancy also applied to several other of the Syrian streams.

From Acre to Sour (Tyre,) is a distance of about thirty miles, over a fertile plain backed by the mountains of Galilee, and presenting some bold headlands, one of which, called Cape Nakour, is the "Ladder of Tyrus," mentioned in the first Book of Maccabees, (xi. 59,) and another has in all ages borne a name descriptive of its appearance; it was formerly termed Promontorium Album, and is now styled Ras-el-Abiad, or Cape Blanco, all equivalent to the White Cape, being a huge mass of limestone, over which is carried an ancient road, propped up by a low wall; a work ascribed by the natives to Alexander the Great, but more probably of Roman origin.

About three miles beyond Acre is a fountain, and the ruins of what is supposed to have been a monastery, bearing still the name of Semmars, or St. Mary's; and six miles further is a small town called Zib, on a hill by the sea-shore, the Achzib of Scripture, and the Ecdippa of the Greeks. Next occurs Cape Nakour, between which and Cape Blanco are the ruins of a castellated edifice, called Scandaleum, it being, like many other objects in the East, whose real origin is unknown, ascribed by the Mohammedans to Scander, or Alexander the Great. It has, issuing from under its ruined walls on the beach, a fountain of pure water, and is known to have been occupied and strengthened by the forces of Baldwin the Second, in 1124, when proceeding to besiege Tyre. A little inland lies a place now called Om-el-Hamid, where are considerable remains of ancient military works, of doubtful origin; and from hence to the site of ancient Tyre extends a paved road, still in good condition. About three miles before reaching this spot, are observed three cisterns, of large dimensions, situate about half a mile from the beach, and supplied from some source which has not yet been discovered; they bear the name of Solomon's Cisterns, and are traditionally stated to have been built by Solomon as a return for the services rendered by Hiram in the erection of the Temple; but the ruined aqueduct by which the water was conveyed to Tyre is supported on arches, and is therefore deemed to be of Roman construction.

The Tyre of the present day is situated upon a barren peninsula, of a triangular shape, and about a quarter of a mile broad, connected with the mainland by an isthmus of shifting sand-hills. Being, like most of the Syrian towns, surrounded by a wall with towers, and having an ancient castle of large dimensions, it presents a magnificent appearance from a distance, but when more closely examined, it is the very picture of desolation. The sand on the isthmus is piled up against the wall, which it threatens speedily to overwhelm, the whole of the peninsula is spread over with shapeless ruins which extend far into the sea, and the inhabited portion is not above one third of the whole, the population not exceeding 1000; whilst the only harbour (and that too choked up with sand and broken columns of granite or marble,) is but 150 yards across, and can admit no vessel larger than a fishing-boat.

Tyre is a place of remote antiquity, though less ancient than Sidon. It was originally situate on the mainland; was the founder of Carthage and numerous other colonies; and carried on an extended commerce, which is fully detailed by the prophet Ezekiel (chap. xxvii). As the city increased in importance, buildings appear to have been erected upon the present peninsula, but which was then an island three-quarters of a mile from the shore. To this place the whole population retired from the fury of Nebuchadnezzar, (about B.C. 580,) by whom they had been besieged for thirteen years, and whither, for want of shipping, he was unable to pursue them. The city on the mainland was utterly destroyed by the conqueror, and with its ruins Alexander in after-times constructed the causeway or isthmus which now exists, for the purpose of reaching the new city.

The cities on the Phœnician coast early entered into a kind of commercial league, of which Sidon was at first the head, but afterwards Tyre, which latter exercised the supremacy so rigorously that some of the dependant cities called in the aid of the Assyrians. Tyre was in consequence besieged by Shalmanezer for five years, but without effect; Nebuchadnezzar, however, destroyed it, and shortly after, the form of government, which had heretofore been regal, became republican, being administered by shophetim, who have been likened to the Hebrew judges and the Roman consuls. In B.C. 538, when the city surrendered without resistance to Cyrus, this form of government was continued, and the Tyrians were so favourably treated by the Persian monarchs, that they made a most vigorous defence against Alexander, who at length took their city after an eight months' siege, and treated the vanquished in a most barbarous manner (B.C. 332). He also destroyed the city; and, though it was soon rebuilt, its commercial importance was in a great measure gone, the trade by which it had been enriched being transferred to Alexandria.

Of the power and splendour of the elder Tyre, (the Palæ-Tyrus of Strabo,) we have the most lively accounts in the inspired pages of Isaiah and Ezekiel. The latter especially speaks of it as "the renowned city, which was strong in the sea," and says, "Thy builders have perfected thy beauty," (xxvii. 4,) whilst denouncing the judgments of the Lord upon it for its pride, luxury, and cruelty. Profane writers also mention the new city in terms of admiration, and coins remain which testify, by their pompous inscriptions, that its pride was little abated by the repeated fall of its fortunes. It is styled on them, the "Sacred Asylum," "the Metropolis," "Self-governed," and it appears, indeed, to have again risen into consequence under the Roman empire. Whatever injury it sustained at its conquest by the Saracens, (A.D. 639,) seems to have been repaired; for when the first Crusaders passed it on their way to Jerusalem, (A.D. 1099,) it was a strong and stately city, surrounded by a lofty double wall, which was still further strengthened at the mole; and it did not fall into their hands until the year 1124, when it was captured by Baldwin the Second, assisted by the Venetians, to whom a third part of the town was assigned.

Tyre having in former days been an archbishopric, the see was now restored, and some remains of the cathedral are yet to be seen*. After the battle of Tiberias, (A.D. 1187,) great numbers of the fugitives took refuge in Tyre, which was immediately besieged by Saladin, but successfully defended by Conrad of

* The ancients attributed to the Sidonians the invention of arithmetic and astronomy, as also of the manufacture of glass and fine linen; to the Tyrians they ascribed the discovery of the purple dye, and working in ivory; but it appears probable that most of these arts were derived from the Egyptians.

* William of Tyre, an Englishman, and a valuable historian in relation to the Crusades, was one of its archbishops.

Montferrat, who arrived by accident when the place was on the point of surrendering. He immediately claimed the sovereignty of the town, took the title of marquess of Tyre, and refused to admit within its walls, the king, Guy de Lusignan, who soon departed to lay siege to Acre. Conrad, also, having married Isabel, the sister of Baldwin the Fourth*, laid claims to the kingdom, and it was at length adjudged to him, Guy becoming King of Cyprus. He never, however, enjoyed the regal dignity, being very shortly after murdered in the street of Tyre, (April 28, 1192); a deed which has been, without sufficient foundation, ascribed to the order of Richard Cœur de Lion, who had a quarrel with Conrad on account of an unseemly alliance which the marquess had entered into with Saladin.

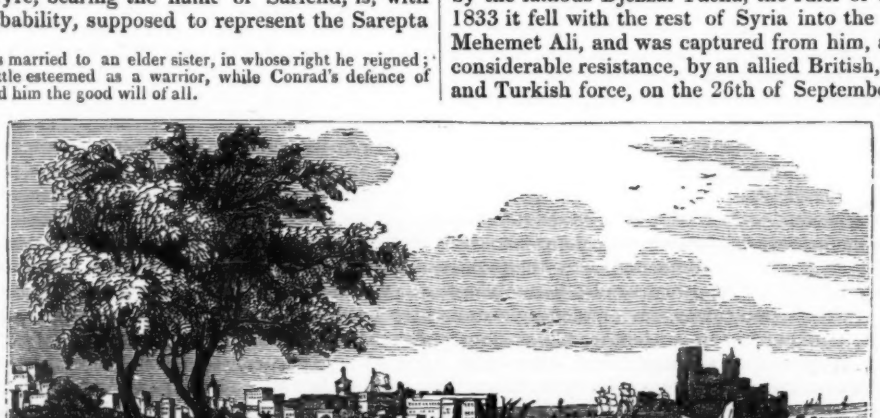
Tyre remained in the hands of the Christians till 1289, when it was captured by the Egyptians. The inhabitants were allowed to withdraw with their property, but all the churches and fortifications were destroyed, and the harbour choked up with the rubbish. In this state it remained until about 1766, when it was taken possession of by one of the mountain tribes (the Mutualis,) who made some efforts to restore the port, and to whom is owing all the present importance of the place. It exports some cotton grown in the neighbourhood, but its chief trade is as one of the ports of Damascus, a portion of the European produce intended for that city being usually disembarked here. From 1833 to the 26th of September of the present year, the town was in the possession of the Pacha of Egypt, but on the last-mentioned day it surrendered, without resistance, to the forces of the Allies.

From Tyre the coast bends to the north-east, and at the distance of five miles is passed the river by which the valley of Baalbec is watered. This is one of the most considerable streams in Syria, and was anciently called the Leontes; now it bears the name of Liettani, or Kasmieh. The road to Saide (Sidon) is now carried over the foot of the mountains of Lebanon, which here approach the shore. Two or three collections of ruins occur, which have not all been satisfactorily identified; but one village, about twelve miles north of Tyre, bearing the name of Sarfend, is, with much probability, supposed to represent the Sarepta of Scripture (1 Kings xvii. 9). It stands on a hill, cut out into tombs, half a mile from the sea, and is, like Sarepta, celebrated for its wine, the slopes being covered with vineyards. From hence to Sidon (ten miles) the country is well cultivated; the plain between the mountains and the sea widens to two miles, and is entirely occupied by groves of olive, mulberry, and fig trees, and vegetable gardens, with only narrow paths between them.

Saide itself stands upon an elevated plain near the sea. From a rock on the shore an ancient mole leads to a small isle, on which is a fort commanding the harbour. This is now on the south of the town, the old port to the north being choked up; nor is the new one in much better condition. Saide, however, is still a place of some importance, containing a population of from 8000 to 10,000 persons, of whom about one-third are Christians. A considerable quantity of silk is produced in the neighbourhood, and many of the inhabitants were recently employed in a silk factory which the Pacha of Egypt established; others carry on an export trade of some amount in olive-oil, cotton, and dye-stuffs, though there is no shelter for shipping.

Sidon, the parent of Tyre, though not so splendid in its prosperity, is thus less abject in its adversity; and, indeed, it seems at almost all periods of its history to have had opposite interests and prospects. It was early supplanted as head of the Phœnician league, by Tyre; and shared all the revolutions to which that city was subject, from the times of the Assyrians to those of the Crusaders. It was conquered in succession by the Assyrians, Persians, Greeks, and Romans, the Saracens, and the Crusaders, and was held by the latter, (except for a few years prior to the third crusade,) for a period of near two hundred years, being taken from them in 1289. Being then dismantled by the victors, it remained in ruins till restored by Fakr-el-Din, who, however, while he built here a palace, in the Italian style, and erected a fortress, both of which yet remain, filled up the harbour with granite columns from the ancient ruins, to prevent the entry of a Turkish fleet sent against him. On his fall, (A.D. 1631,) Sidon became the capital of a pachalic, which was once held by the famous Djezzar Pacha, the ruler of Acre. In 1833 it fell with the rest of Syria into the hands of Mehemet Ali, and was captured from him, after some considerable resistance, by an allied British, Austrian, and Turkish force, on the 26th of September last.

* Guy was married to an elder sister, in whose right he reigned; but he was little esteemed as a warrior, while Conrad's defence of Tyre procured him the good will of all.



MODERN SIDON.

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